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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/050,663	01/16/2002	Adam E. C. Yeh	MS#183303.01 (4965)	6055
7590	04/03/2006		EXAMINER ORTIZ, BELIX M	
Microsoft Corporation Patent Group One Microsoft Way Redmond, WA 98052			ART UNIT 2164	PAPER NUMBER

DATE MAILED: 04/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Supplemental  
Notice of Allowability**

Application No.

10/050,663

Examiner

Belix M. Ortiz

Applicant(s)

YEH, ADAM E. C.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 3/28/2005.
2. ☒ The allowed claim(s) is/are 1-60.
3. ☒ The drawings filed on 16 January 2002 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

*C. Rones*  
**CHARLES RONES**  
**SUPERVISORY PATENT EXAMINER**

## **DETAILED ACTION**

### **EXAMINER'S AMENDMENT**

1. The following is an Examiner's statement of reasons for the indication of allowable subject matter: The prior art of record does not disclose, make obvious, or otherwise suggest the structure of the applicant's prediction program, prediction apparatus, and prediction method together with the other limitations of the independent claims.

The dependent claims being further limiting and definite are also allowable. Any comments considered necessary by applicant must be submitted no later than the payment of the Issue Fee and, to avoid processing delays, should preferably **accompany** the Issue Fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Authorization for this examiner's amendment was given in an interview with Robert M. Bain on October 19, 2005.

#### **AMENDMENT TO THE CLAIMS:**

Claims 1, 45-47, and 49-51 have been amended. Claim 1-60 remain pending in the application.

#### **WHAT IS CLAIMED IS:**

1. **(Currently Amended)** One or more computer readable storage media having a data structure stored thereon, the data structure comprising:

a general dimension containing members in a plurality of levels, the levels being organized according to a hierarchy in which descending levels in the hierarchy are defined by increasing specificity;

a summary cube containing the members of at least one upper level of the general dimension; and

a detail cube, the detail cube including a horizontally partitioned dimension containing a first subset of the members of at least one lower level of the general dimension, the lower level associated with the partitioned dimension being lower in the hierarchy than the upper level associated with the summary cube, the general dimension being horizontally partitioned based on a selected member of the upper level to form the horizontally partitioned dimension, the first subset of the members of the lower level corresponding to the selected member of the upper level.

45. **(Currently Amended)** The computer-readable storage media of claim 44 wherein the template component includes a partition template for defining the second partitioned dimension component based on a user-specified partition key and a cube template for defining the second detail cube database component based on the user-specified partition key.

46. **(Currently Amended)** The computer-readable storage media of claim 45 wherein the partition key is representative of the other selected member of the upper level.

47. **(Currently Amended)** The computer-readable storage media of claim 45 wherein the workflow implemented by the template component creates a metadata file

storing information for use in defining the second partitioned dimension component and the second detail cube database component, and further comprising a COM-based application for reading the metadata file and deploying OLAP objects for creating the second partitioned dimension component and the second detail cube database component.

49. **(Currently Amended)** The computer-readable storage media of claim 48 wherein the zoom in event comprises a drill through from the summary cube database component to the detail cube database component.

50. **(Currently Amended)** The computer-readable storage media of claim 48 wherein the zoom out event comprises a roll up from the detail cube database component to the summary cube database component.

51. **(Currently Amended)** The computer-readable storage media of claim 48 wherein the navigation component comprises a metadata file configured to identify zoom in/zoom out events behavior.

### *Reasons for Allowance*

1. Claims 1-60 are allowed.
2. The following is a statement of reasons for the indication of allowable subject matter:  
the prior arts of records, neither anticipates nor renders obvious the following limitations as claimed:

As to claims 1, 18, and 52 the prior art of records fail to anticipate or suggest one or more computer readable media having a data structure stored thereon, the data structure comprising:

a summary cube containing the members of at least one upper level of the general dimension; and

a detail cube, the detail cube including a horizontally partitioned dimension containing a first subset of the members of at least one lower level of the general dimension, the lower level associated with the partitioned dimension being lower in the hierarchy than the upper level associated with the summary- cube, the general dimension being horizontally partitioned based on a selected member of the upper level to form the horizontally partitioned dimension, the first subset of the member of the lower level corresponding to the selected member of the upper level, together with the other limitations of the independent claims.

As to claim 44 the prior art of records fail to anticipate or suggest a template component for implementing a workflow to automatically create a second partitioned dimension component and a second detail cube database component the second partitioned dimension component containing a second of the members of the lower level of the dimension, the second subset of the members of the lower level being partitioned from the dimension based on another selected member of the upper level, the second detail cube database component including the second partitioned dimension component and one or more sub-cubes containing aggregations of the second subset of the member

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of the lower level from the second partitioned dimension component, together with the other limitations of the independent claims.

As to claim 48 the prior art of records fail to anticipate or suggest a detail cube database component including the partitioned dimension component and one or more sub-cubes containing aggregations of the subset of the members of the lower level from the partitioned dimension component; the detail cube database component and the summary tube database component having the same dimensionality; and

a navigation component for implementing zoom in/zoom out events to navigate between information in the summary cube database component and information in the detail cube database component, together with the other limitations of the independent claims.

The dependent claims being further limiting and definite are also allowable.

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Belix M. Ortiz whose telephone number is 571-272-4081. The examiner can normally be reached on Monday-Friday 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Rones can be reached on 571-272-4085. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

bmo

October 19, 2005.



**CHARLES RONES**  
**SUPERVISORY PATENT EXAMINER**